CLAIMS

What is claimed is:

1. A method comprising:

forming a sacrificial layer over less than the entire portion of a contact area on a substrate, the sacrificial layer having a thickness defining an edge over the contact area;

forming a spacer layer over the spacer, the spacer layer conforming to the shape of the first sacrificial layer such that the spacer layer comprises an edge portion over the contact area adjacent the first sacrificial layer edge;

removing the sacrificial layer;

while retaining the edge portion of the spacer layer over the contact area, forming a dielectric layer over the contact area;

removing the edge portion; and

forming a programmable material to the contact area formerly occupied by the edge portion.

2. The method of claim 1, wherein the contact area is a portion of an electrode formed to a first contact point on the substrate, the method further comprising:

forming a second contact point to the programmable material.

3. The method of claim 1, wherein the dielectric layer and the spacer layer comprise materials having different etch characteristics such that the spacer layer can be removed exclusive of the dielectric layer.

4. The method of claim 1, wherein forming the spacer layer comprises depositing the spacer layer over the sacrificial layer and, after depositing, exposing the sacrificial layer.

5. The method of claim 4, wherein exposing the sacrificial layer comprises anisotropically etching the spacer layer.

6. A method comprising:

over an electrode formed to a first contact point on a substrate, the electrode having a first contact area, forming a first dielectric layer;

forming a sacrificial layer on the first dielectric layer;

patterning the sacrificial layer into a body;

forming at least one spacer along a side wall of the sacrificial body, the at least one spacer overlying a portion of the first contact area;

after forming the at least one spacer, removing the sacrificial body;

conformally forming a second dielectric layer on the first contact area;

exposing the at least one spacer;

removing the at least one spacer;

exposing a second contact area of the electrode, the second contact area within the first contact area; and

forming a material comprising a second contact point to the second contact area.

7. The method of claim 6, further comprising removing the at least one spacer after exposing the at least one spacer.

8. The method of claim 1, wherein a material for the first dielectric layer and a material for the at least one spacer comprise a similar etch characteristic.

9. The method of claim 7, wherein a material for the second dielectric layer comprises a different etch characteristic than a material for the first dielectric layer.

10. The method of claim 6, wherein forming a material comprising a second contact point comprises forming a programmable material within the second contact area.

11. The method of claim 1, wherein forming the at least one spacer comprises conformally depositing a layer of spacer material over the sacrificial body and then exposing a surface of the sacrificial body.

12. The method of claim 11, wherein exposing the surface of the sacrificial body comprises anisotropically etching the layer of spacer material.

13. The method of claim 6, wherein after removing the sacrificial body, the method further comprises exposing a portion of the first area exclusive of an area covered by the at least one spacer.

14. The method of claim 13, further comprising recessing the exposed surface of the electrode.

15. An apparatus comprising:

a volume of programmable material;

a conductor; and

an electrode disposed between the volume of programmable material and the conductor, the electrode having a contact area at one end coupled to the volume of programmable material, wherein the contact area is less than the surface area at the one end.

16. The apparatus of claim 15, wherein the conductor is a first conductor, the apparatus further comprising a second conductor coupled to the programmable material.

17. The apparatus of claim 15, wherein the programmable material is a phase change material.

18. The apparatus of claim 17, wherein the phase change material is a chalcogenide material.